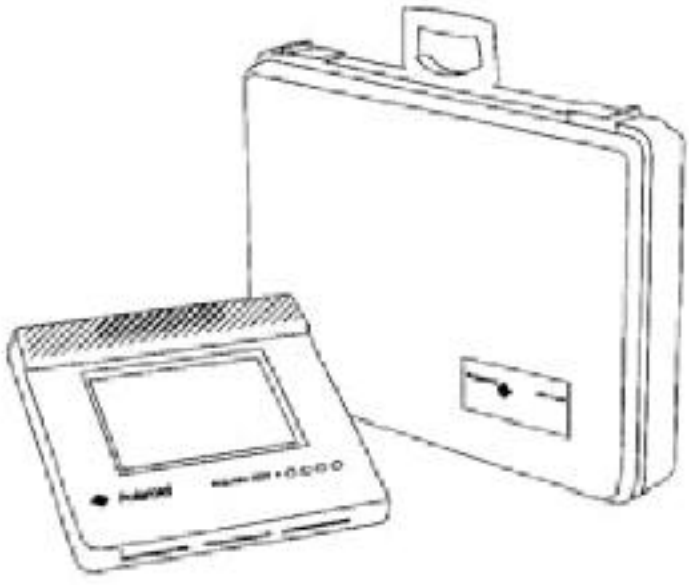
Polaroid

Repair Manual



Polaview 1500 LCD Panel

September 1996

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SCOPE

This document describes the assembly of the POLAVIEW 1500 board level elements.

The manual serves as a guide for the replacement of such elements when the unit needs servicing. Board level repair may only be performed by the company :

COMPANY
REFERENCE

as authorized by ASK. Any unauthorized repair that is performed outside the scope of this document will violate any warranties and could potentially damage the unit.

The document does not assist in repairing the elements themselves (such as replacing individual components on the electronic circuit boards).

This Board Level Service manual is accompanied by the SPAREPART PRICE LIST document which outlines order procedures for replacement parts, warranty details, returns and payment terms etc.

REVISION HISTORY

01.03.94 JE Draft based on Service Manual Impact 21.
01.03.94 HM Upgraded to Polaview 1500.
12.09.94 ØØ Updated tables and drawings

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TOOLS

You need a the following tools for board level repair :

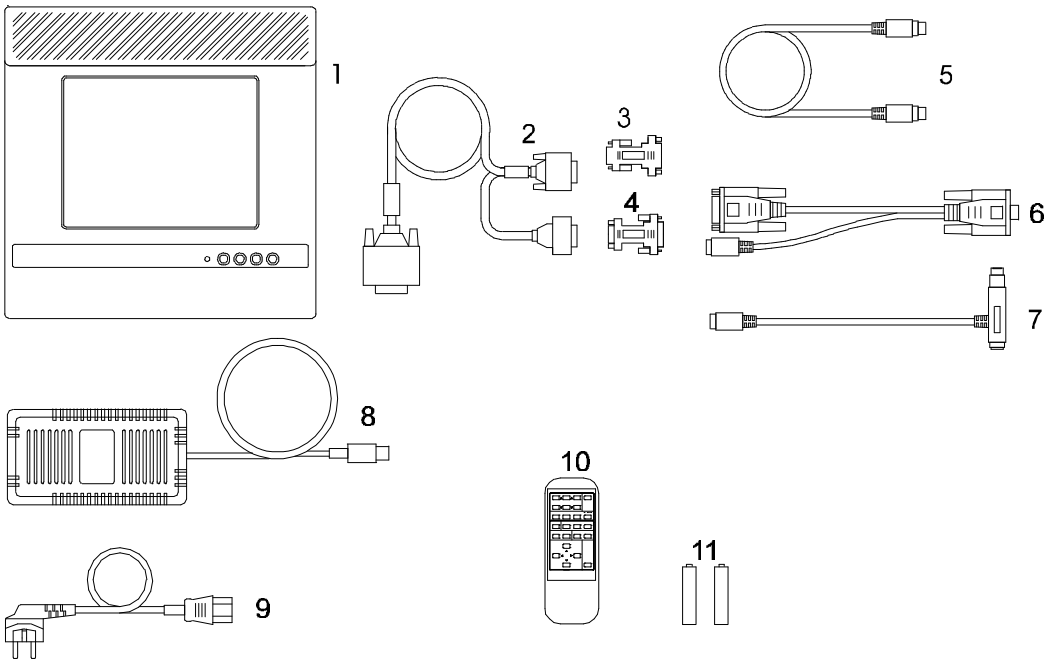
TOOL	USE
Pozidrive no.2 screwdriver	Opening housing, replacing elements
5 mm nutdriver	Fastening the COMPUTER connector
8 mm open-end wrench	Replacing cooling fan

SYSTEM STRUCTURE

The display system consists of the following main elements :

	PART #	ITEM	DESCRIPTION
1	201.104	LCD PANEL, POLAVIEW 1500	Display unit
2	301.075	CABLE VGA	Analogue computer cable
3	301.077	CABLE-ADAPTER MACII MON.	MACII monitor adapter
4	301.076	CABLE-ADAPTER MACII COMP.	MACII computer adapter
5	301.102	MOUSE CABLE	Base 4m mouse cable
6	301.103	MOUSE ADAPTER PC	PC mouse adapter
7	301.105	MOUSE ADAPTER MAC	Mac ADB mouse adapter
8	300.061	POWER -5, 12, 5 V	Power supply unit
9	300.065	POWER CORD EUR	European power cord
*	300.066	POWER CORD GB	UK power cord
*	300.067	POWER CORD US	US power cord
10	402.084	REMOTE CONTROL, POLAVIEW 1500	Infrared remote control
11	408.000	BATTERY 2 x LR03	2 Pcs. AAA Batteries

* Accessories not included in regular POLAVIEW 1500 delivery (Cuuntry/Language dependant)
For a complete overview of parts & accessories availabel, see the Addendum (SPPL).



REPLACING SYSTEMS ELEMENTS

All system elements as described above are replaceable in the field. The repair of the display unit at the board level is described below. The other elements (such as electronics) are not serviceable and should therefore be replaced if they fail.

DISPLAY UNIT STRUCTURE

The display unit consists of the following board level elements :

	PART #	ITEM	DESCRIPTION
1	402.111	CABINET TOP, POLAVIEW 1500	Housing top, complete
2	400.130	GLASS	Protection glass
3	400.129	MASK I256	Rubber mask
4	300.028	KYOCERA KCL 6448 DSTP	LCD module
5	400.128	FRAME	LCD holder
6	400.045	PANASONIC FAN	Cooling fan
7	402.110	CABINET BOTTOM, POLAVIEW 1500	Housing bottom, complete
8	400.130	GLASS	Protection glass
9	506.243	KEYS (x4)	Silicone rubber keys
10	308.048	KEYBOARD	Front panel circuit board
11	301.096	KEYBOARD CABLE	Keyboard cable
12	402.112	BRACKET, POLAVIEW 1500	Connector Panel and Decal
13	308.049	CONTROLLER, I256	Controller board

See the attached exploded drawing of the board level elements on page 7.

Additionally available is a kit of mounting details (screws, washers etc) :

POS	PART#	ITEM	DESCRIPTION
	402.501	MOUNTING KIT	Kit of mounting details

SERVICING THE DISPLAY UNIT

All maintenance of the unit shall be performed at a static-free workstation. Work in a dust free environment if possible, and have access to a high pressure air blower to remove dust when assembling the unit.

The unit must be disconnected from the power supply and computer before opening.

Nominal time needed to perform each operation is shown in square brackets [ ].

Opening the unit [15 min]

Place the display facing down on a scratch-free surface. Remove the four mounting screws. Gently open the housing, observing the cables that connect the elements in the top and bottom parts.

Replacing the controller card [15 min]

Disconnect the LCD (4) from the controller board (13), and the fan (6) from the controller board (13). Unscrew the three mounting screws of the board and the two screws holding the bracket to the computer connector (12).

Replace with a new card, reversing the above procedure.

Replacing the LCD module [15 min]

Disconnect the LCD (4) from the controller board (13). Unscrew the four mounting screws of the LCD holder (5). Gently lift off the module. Beware that the top glass is held in place by the module.

If the LCD module is broken, soak up any spilled liquid and dispose of in ordinary litter. Use gloves. Wrap broken glass thoroughly and wash your hands.

Replace the LCD module. Take care to remove any dust between the LCD module and the glass before reassembling.

Replacing the keyboard [15 min]

The keyboard (10) is mounted in the housing top. A circuit board holds four separate silicone rubber keys (9) in place.

Disconnect the keyboard cable (11) from the keyboard (10). Unscrew the screws holding the circuit board. Carefully lift off the board. Replace the rubber keys (9) and/or the circuit board as needed. Check key operation after reassembling for smooth operation.

Replacing the fan [15 min]

The fan (6) is mounted on the housing bottom by four nuts. Disconnect the fan cable from the controller board (13) and remove the four nuts.

Replace with a new fan.

Replacing the upper protection glass [15 min]

To replace the upper protection glass (2), follow the above procedure on replacing the LCD module. If the glass is broken, observe the surface of the LCD module for scratches that may affect the display quality and replace the LCD module if necessary. Wrap broken glass thoroughly.

Replace with a new glass, reversing the above procedure.

Replacing the lower protection glass [15 min]

This glass (8) is removed from the outside, without opening the display unit, and may be performed by the user. The glass is held in place by springs. Use two fingers to slide the glass out and replace with a new glass. Refer to the instructions in the User Guide.

Check that the new glass is correctly ground on the edges to avoid cutting wounds.

Replacing the housing top [30 min]

Remove the LCD holder (5), LCD module (4), rubber mask (3) and upper glass (2) as described previously under LCD module replacement.

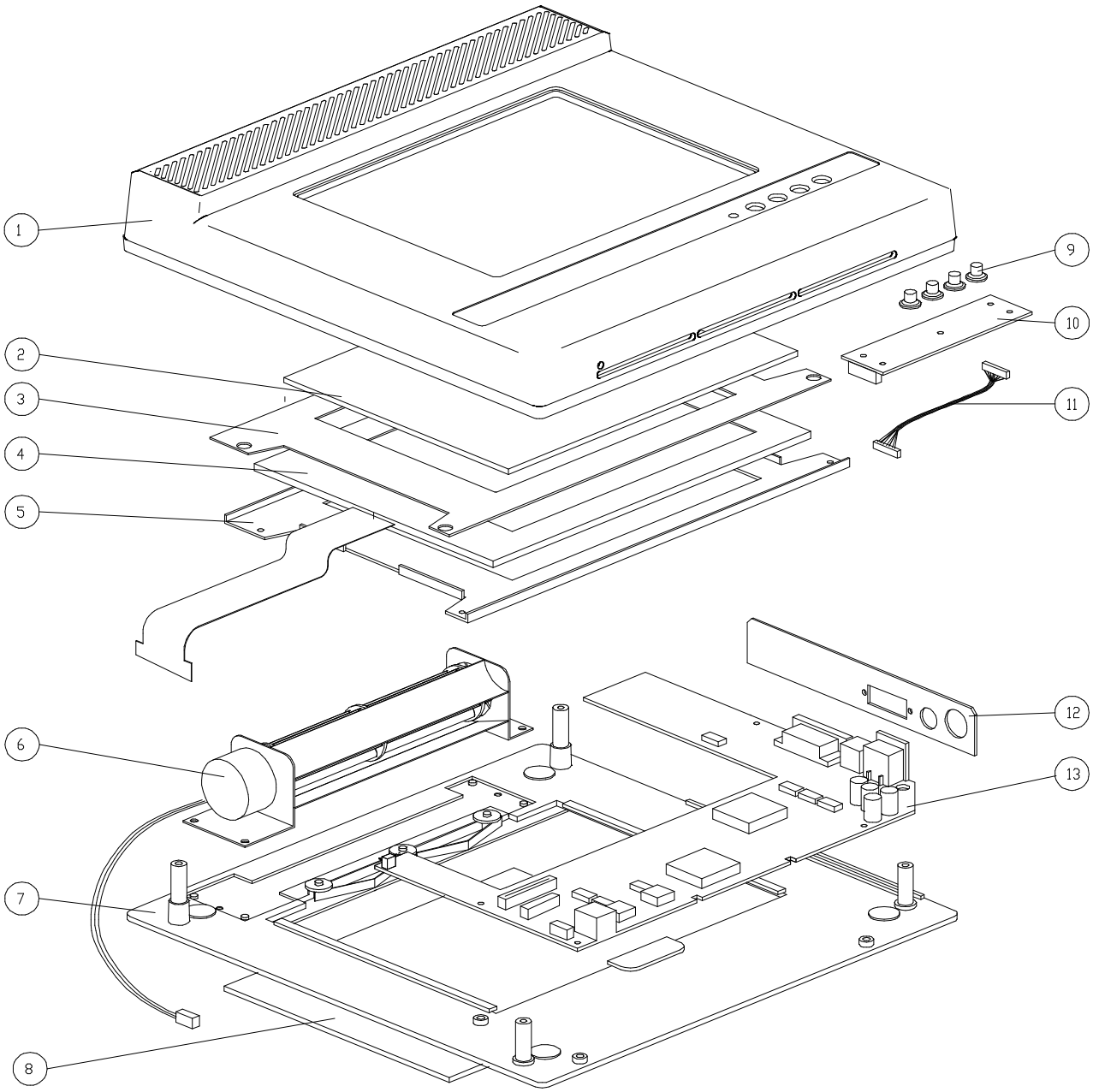
Also remove the keyboard (10) and cable (11).

Replace with a new housing top, reversing the above procedure.

Replacing the housing bottom [30 min]

Remove the controller board (13) and fan (6) as described previously.

Replace with a new bottom part.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